

## STUDENTS' PERCEPTIONS ON THE IMPLEMENTATION OF KAHOOT! IN ENGLISH LANGUAGE TEACHING

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### Abstract

A paradigm of integrating technology in education has been reaching increasing attention in past decades, one of which is by implementing gamification (the use of game-like features in non-game contexts) in English Language Teaching (ELT). This descriptive qualitative study explores how 23 secondary students in Indonesia perceived the strategy (Kahoot! application) in the classroom activities to support their learning activities which were divided into two: brainstorming and Kahoot! implementation as the main learning activity in the classroom. The data was derived from questionnaire and interview section. The finding shows that Kahoot! motivates and engages students in the learning process. It covers three dimensions of students' engagement, namely: cognitive, emotional, and behavioral engagement. However, internet connection becomes a vital factor that has to be considered to create the success of Kahoot integration in teaching and learning activities.

**Keywords:** Gamification, Kahoot, English Language Teaching, students' perception

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### INTRODUCTION

A paradigm of integrating technology in education has been reaching increasing attention in past decades. It is due to the development of technology in many sectors which then lead teachers and other academic practitioners to adjust and design teaching and learning processes to support students to cultivate the skills they need for life in this 21st century. It is due to the fact that mobile phone users are growing rapidly day by day, so that teaching and learning activities are no longer limited to traditional classroom settings. Students can get exposure from outside the classroom by utilizing their mobile devices to obtain any information and access various platforms which support their learning process, such as games designed for education which is usually known as educational games.

The implementation of educational gamification as learning tools in teaching and learning activities has contributed to increase students' engagement and motivate them both intrinsically and extrinsically in the learning process as well as providing an opportunity to increase problem-solving and critical thinking in the classroom (Licorish et al., 2018; Wang & Tahir, 2020).

Gamification is defined as the implementation of game mechanics and principles in non-game contexts. It is usually linked to support students in learning process by taking advantages of human tendency of being competitive. Thus, they can compete with one another to get a certain result in learning process (Jueru et al., 2019).

One of educational gamifications which is well-known is Kahoot! (Wang & Tahir, 2020). Kahoot! is online real-time quiz packages played

by multiplayer users. The concept of Kahoot! as educational gamification is a good combination of student response systems (SRSs) and utilization of devices as existing infrastructures.

It leads to being a good solution to create an interactive learning environment in the classroom (Wang & Tahir, 2020).



Figure 1. Characteristic of Kahoot!

Cameron & Bizo (2019) define “Kahoot! as a popular online multiplayer real-time quiz package that allows students and lecturers to measure learning in an engaging, immediate, entertaining and anonymous manner.” Figure 1 shows eight characteristics of Kahoot! as teaching and learning media that can be highlighted.

**Online** : Kahoot! is a learning application that can be accessed online using an internet connection as the main requirement to enjoy the features provided.

**Multiplayer** : It allows us to use the application with more than one player that leads to creating a competitive atmosphere among other players.

**Real-time** : Kahoot! is used for direct activity in a direct meeting to get direct feedback among users.

**Measuring learning** : Users can utilize Kahoot! to measure how well students understand the topic and materials by giving responses to questions provided.

**Engaging** : Kahoot! increases users’ involvement and participation in the game-based learning activity.

**Immediate** : Users can get direct feedback while playing Kahoot! as a game-based learning platform.

**Entertaining** : Using game-based learning platforms, such as

Kahoot! can help us to create a learning atmosphere becoming more enjoyable and fun.

*Anonymous* : Users are allowed to set their nicknames whatever it is in case they want other users unrecognizing them in the play when they are willing to join quizzes on Kahoot!

Despite the importance of designed principles of gamification which are believed to engage students as users in the context with gamification if those principles are applied consistently (Stieglitz et al., 2017), there are three basic elements of gamification shown in table 1 which have to be considered as well. They include mechanics, dynamics, and aesthetics (it is well-known as MDA frameworks)

Table 1. MDA Frameworks

Element	Description	Examples
Mechanics	functional components of game	leaderboards, points, badges, levels, etc.
Dynamics	Actions in playing a game	feedbacks, narratives, collaborative actions, etc.
Aesthetics	Emotions	sensation, expression, challenge, etc.

Mechanics refer to the functional components of games to help users achieving the desired goals in a play (Sezgin & Yüzer, 2020). Some common game mechanics used consists of leaderboards, points, badges, and levels. Dynamics are simply defined as actions done to interact by utilizing a certain game mechanic in a play, for example, feedbacks, narratives, collaborative actions, etc. Aesthetics refer to users' emotional responses in a play including sensation, expression, and challenge.

As one of educational gamification, Kahoot! combines student response systems (SRSs) and the integration of technology solutions in teaching and learning. It has been used to create active learning by keeping students engaging in the teaching and learning process (Hung, 2017). This application has provided features that give the users direct feedback regarding the response the users give. However, it is rarely implemented in small class-sized and enacting communicative language teaching (Hung, 2017)

Jueru et al. (2019) has mentioned some principles regarding the success of gamification, including Kahoot! application. Those principles

are: 1) Integrating various game elements to facilitate many users with different reactions, 2) Encouraging the user with intrinsic motivation, 3) Having kinds level of goals, such as clear, specific, moderately difficult, and immediate goals, 4) Providing challenges and quests, 5) Being able to be customized, 6) Being visible progression to mastery, 7) Providing feedback, 8) Availability of competing factors, classification/ level-up, status, access/ unlocking content, 9) Letting users to freedom of choice and fail, 10) Immersive learning, 11) New identity or roles, 12) Being easily accessed, 13) Time restriction, and 14) Constant evolution.

In line with the principles, games are considered as effective media to minimize students' boredom because games combine thought and action to accomplish purposeful behaviors or goals (Putu Tressya et al., 2017). Therefore, the idea in setting non-game context into game-like environment, such as implementing Kahoot! in learning English, can motivate students in learning.

Despite positive advantages of integrating Kahoot in the teaching and learning process, the preliminary study showed that students of the

secondary school under the study have not been experiencing any technological game-based learning in the classroom. They are a group that represents all students who were staying in the boarding house who are not allowed to bring their private gadget along staying in the boarding school. Therefore, the present study was worth to be conducted to find out secondary students' perception after experiencing Kahoot! in the learning process since they do not use to access technological devices in their daily life. It is important to know students' responses regarding a certain technique, materials, or media in classroom activities considering that they are the main focus in conducting teaching and learning activities (student center) as well.

## METHOD

The study was conducted in a qualitative design. A total of 22 female students of secondary school in Indonesia enrolled in this study. The participants were staying in a

boarding school; in which they were not allowed to bring their private gadgets. Yet, the media such as computers and internet access for the teaching and learning process was facilitated. Therefore, the teaching and learning process as a part of the study was done in the school's computer laboratory to access Kahoot! application.

Figure 2 shows the instructional design in the classroom under the study. Teaching and learning activities are divided into two main activities: brainstorming and the implementation of Kahoot! Brainstorming activities were conducted in the form of a listening cloze activity to introduce the topic of the study in which the students have to find the missing words based on the audio. Listening cloze was conducted to bring students' attention to the language elements. The deleted words were directed to verbs as the main attention to the sentence structure changing and then followed by an explanation. Therefore, they could finally notice the grammar structure.

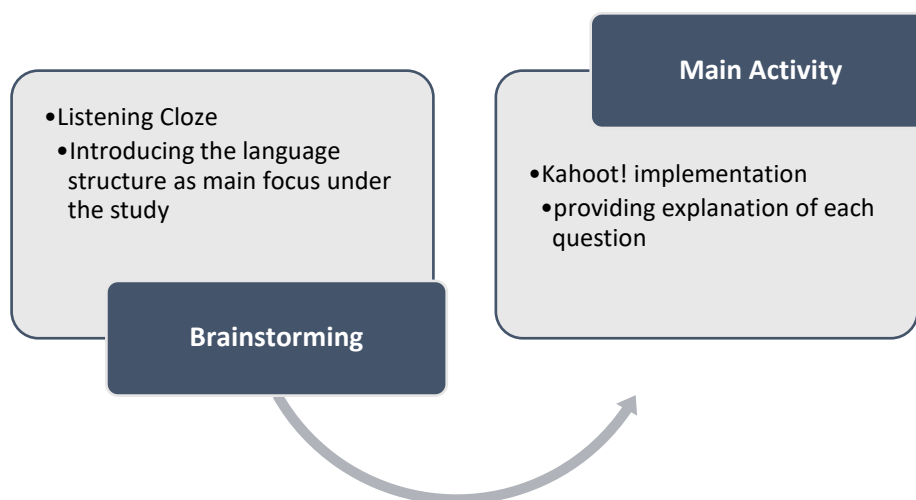


Figure 2. Instructional Design

The activity was continued to check students' understanding of the topic under the study by implementing Kahoot! in the teaching and learning process. In this step, students were required to answer 10 questions in a multiple-choice quiz. Students had to answer each

question in 20 seconds. After answering each question, Kahoot! showed how many students answered the question either correctly or incorrectly and put them in a rank. The faster students answered the question correctly, the

more they got the point. It would then put them in a rank among other players.

The teacher pauses the section of answering the following question to provide the students with feedback or explanation regarding the previous question. They discussed why a certain answer in each question was correct while others were incorrect to make sure that it is clear before answering the following question so that students understood the topic and became more prepared for the following questions.

Figure 3 shows how the appearance of Kahoot! implementation in the teaching and learning process. Students have to enter the game PIN to be able to join in the play. The multiple choices are represented by 4 shapes with different colors. What is shown in figure 3 can only be seen from one source device (teacher's device) as the main screen. Students can only see the multiples choices (the icon, including 4 shapes and colors without the alphabetic words) on their screen. Therefore, students have to pay attention to the main screen before submitting their responses.

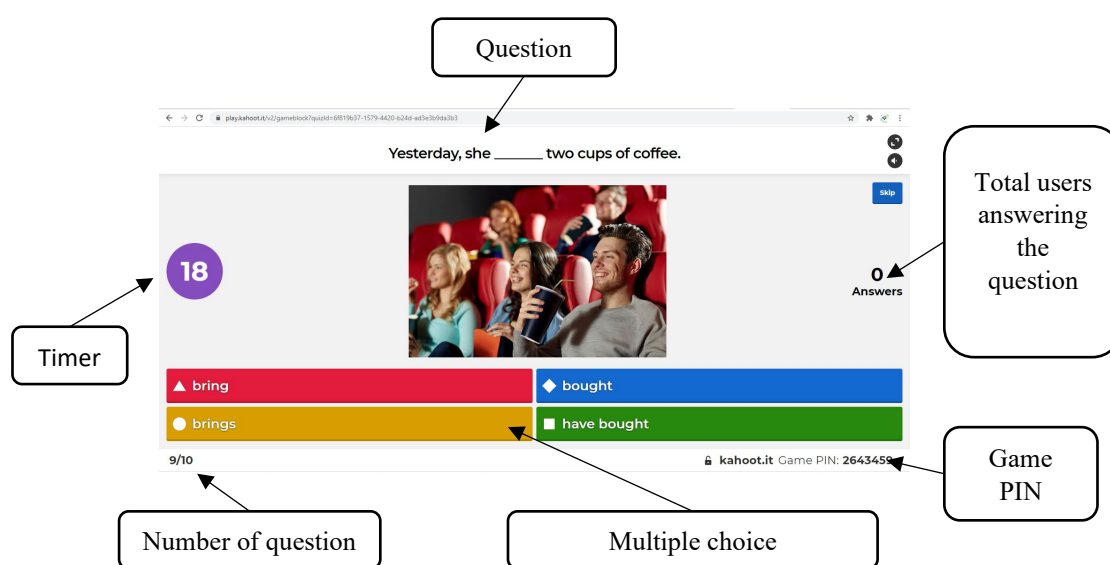


Figure 3. Sample Question on Kahoot!

After the implementation of Kahoot! in the teaching and learning process, the students were required to fill the questionnaire by following the Google Form link provided. The interview was done in semi-structured form to get more detailed information based on questionnaire results. The questions, in both questionnaire and interview, were constructed in Bahasa to understand the question better. The result of the questionnaire and interview is then interpreted and described qualitatively to get detailed information about students' perceptions regarding the implementation of Kahoot! in English Language Teaching.

## FINDINGS AND DISCUSSION

### *Kahoot! Motivates Students in Learning*

Based on the result of the questionnaire, a question regarding their comments about classroom activity which integrating Kahoot! to comprehend topic under the study shows the mutual answers that learning activities in the classroom are interesting. Some students mentioned that they were more motivated in learning. One of them stated that they could avoid feeling sleepy. Another student put the word "gregret" (highly motivated, red) to describe how she felt more motivated in learning. All those responses indicate that students are feeling motivated after

experiencing game-based learning using Kahoot! application in the teaching and learning process.

Keeping students engaged in teaching and learning activities is a challenge (Wang & Tahir, 2020). However, integrating game-based learning platforms, such as Kahoot! can help teachers to create a positive atmosphere in classroom activities. Feeling motivated shown by students has affected their positive actions regarding their response in the learning environment. The success of the learning outcome which is shown by students' comprehension of the materials can be connected to the improvement of students' motivation in learning (Wang & Tahir, 2020).

### ***Kahoot! Engages Students in Learning***

Concerning students' engagement in teaching and learning activities, there are three dimensions of students' engagement shown in figure 4, including cognitive, emotional, and behavioral engagement. It is in line with the concept of students' engagement provided by (Pino-James, 2018) that the concept relies on the idea of how students act, feel, and think to get a relatively complete characteristic of engagement.

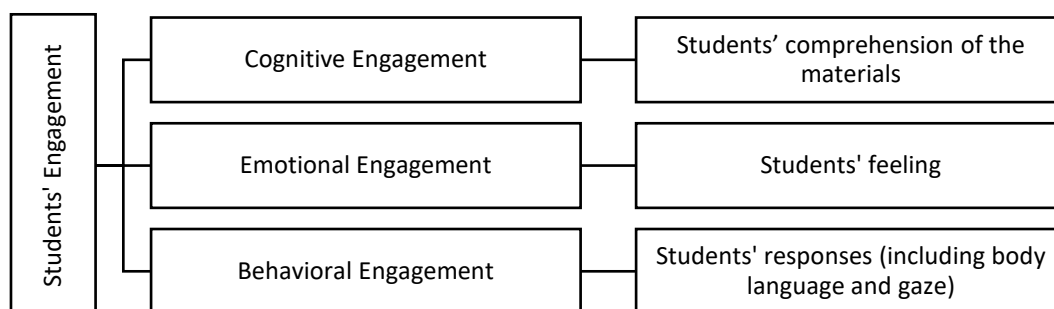


Figure 4. Dimensions of Students' Engagement (Pino-James, 2018)

#### ***Cognitive Engagement***

Cognitive engagement is derived from the aspect of students' comprehension of the materials (Zhang, 2017). Regarding students' cognitive engagement, they mentioned the following statements.

**Student 2:**

"It is easy and makes students feeling happy as well"

**Student 3:**

"Yes, the activities were very interesting"

**Student 7:**

"Yes, the materials can be comprehended because the learning activity is not boring"

**Student 8:**

"Yes, it is because the materials are delivered in an enjoyable way and by using simple language which can easily be understood"

The result of the questionnaire shows that students could understand the materials given. Their understanding of the materials shows the quality of their work in the learning process (Oga-Baldwin, 2019). Some reasons regarding their answers show that it was because the teaching and learning process was fun,

enjoyable, and interesting. That is why they did not feel bored in the learning activity.

The answers told that the effect of implementing Kahoot! contributed to creating a more fun atmosphere in learning and it then led to the understanding of the materials. Students even told that the feedback given by the teacher in the form of explanation regarding either correct or incorrect answers to every single question had helped them a lot in understanding the materials.

However, one student mentioned that she did not understand the material as stated below:

**Student 12:**

“Not yet (not understood yet, red) because I do not understand English”

The student seemed to need extra time to understand the material because of the word “not yet” which indicates the possibility of something that can happen. she used the word “not yet” instead of “No”. In addition, the incomprehension about the materials was because of their incomprehension about the English language, meaning that they got difficulties in transferring the meaning of the target language (English) into their native language (Saville-Troike, 2006).

The result of the interview done with two students shows that they were enjoying learning activities by implementing Kahoot! as well. It means that the results of both questionnaire and interview data show supporting data from each other. Therefore, it can be concluded that the implementation of Kahoot! application in the teaching and learning process has contributed to help students engaging cognitively by simply looking at how they can comprehend the materials (Zhang, 2017).

*Emotional Engagement*

Among other dimensions of students' engagement in the teaching and learning process, emotional engagement is considered outstanding and repeatedly mentioned by the participants in both the questionnaire and

interview section. It relates to how students feel after experiencing implementing Kahoot! in learning activities.

The question regarding this emotional engagement is constructed in an open-ended one. Therefore, students can mention anything they feel about implementing Kahoot! in the learning activity.

**Student 1:**

“The learning process is enjoyable and not boring so that I do not feel sleepy in the class and I can understand the material as well”

**Student 2:**

“Fun and exciting. It makes me very excited”

**Student 3:**

“Very enjoyable!”

**Student 14:**

“It is very exciting and increases enthusiasm for learning English”

The result of the questionnaire shows that all of the students said that the implementation of Kahoot! In teaching and learning activities was interesting, enjoyable, and fun. Therefore, it made students feel happy and avoid boredom in learning activities in the classroom. Other students gave an additional comment:

**Student 17:**

“Exciting! I can learn English while playing the game”

**Student 21:**

“It is interesting because I can learn something while playing the game”

Those students' responses show that gamification applied in the classroom has given positive impacts on their learning process because of that educational-purposed game

(Kahoot!). They can learn and understand the materials while playing the game.

Emotional engagement shown by students in the teaching and learning process can build a positive relationship between the teacher and students. It may affect how this emotional engagement supports other dimensions, such as behavioral engagement (Oga-Baldwin, 2019). It is supported by one of the students' statements on the questionnaire:

**Student 15:**

"I think this leaning strategy makes students interested because it is fun"

This statement indicates that she has witnessed her classroom environment, especially her friends, becoming more enthusiastic and motivated in learning. In short, when students feel happy and interested in the learning process, it can promote positive behavioral engagement as well, such as keeping students more motivated and active learning.

*Behavioral Engagement*

Behavioral engagement refers to students' participation in the teaching and learning process. In this case, students respond to the instruction in implementing Kahoot! including body language and gaze which can easily be recognized (Oga-Baldwin, 2019).

When students were required to comment on the teaching and learning process in implementing Kahoot!, the students hoped that the game-based learning such as the study could be re-conducted at other times. some of the students stated:

**Student 11:**

"This game-based learning hopefully can be conducted once a week" (while **Students 12** mentioned once a month)

**Student 13:**

"The method hopefully can be implemented in all schools"

**Student 19:**

"The questions should be added because it was very fun"

Some comments mentioned indicated that students have given positive responses regarding the implementation of Kahoot! in classroom activities. It encourages them to participate and they seem to be "addicted" to the media and method provided. This study can be used as a reflection about teaching and learning activities which is conducted along this time. Teachers can facilitate students with more interactive and interesting methods. Therefore, students can be more engaged in the learning process which then helps them to be active learners.

**Challenges in Kahoot! Implementation**

There are some challenges found in the implementation of Kahoot! in teaching and learning activities.

**Student 15:**

"The materials are understood enough. The problem is from the internet connection which was disturbing"

The statement indicates that the problem with internet connection during implementing Kahoot! might disturb the teaching and learning process because the internet becomes one of vital factors in Kahoot! implementation. Several students could not give their responses to a question because the icons for answering the question which usually appeared on their computer screen did not show up. Therefore, it affects their score because the later they submit their responses, the less score they get. Although their rank on the play does not influence their score generally in the learning process, a sense of competitiveness among others is a matter. This element of gamification attracts them more in the learning process.



The result of the interview shows the same response about the internet connection in Kahoot! implementation. The participants felt unsatisfied because it disturbed them while playing. Therefore, they had to get a lower rank.

In this case, the awareness of integrating technology in the teaching and learning process has to be noticed. This is due to the development of technology in all sectors of life, including education. Therefore, educational practitioners have to adjust the change for students as their provision in their society.

For greater purposes, the adjustment towards the increasing of technology also helps the teachers and learned to have authentic communication with other English speakers and learners from around the world by utilizing social media as media to communicate. The existence of social media recently, such as Facebook, YouTube, Twitter, Instagram, etc. can help the learner to have communication easily, both in written and spoken. Those social media are easily downloaded and installed in their smartphone which everyone now has. By having authentic communication, especially with the native speakers. Therefore, the success of communication purposes in learning English can easily be reached regardless of the ease of learning lessons through certain applications, such as Kahoot!

Another challenge in Implementing Kahoot! in the teaching and learning process is the application accessibility. It considers that teaching and learning activities are mostly done in the traditional classroom with limited access to technological devices.

The result of the questionnaire shows that all students have never experienced technological games for educational purposes in their traditional classroom. This was confirmed by the teacher as well that it would need a longer time for preparation which was not comparable with the time allotment of one meeting. That was why the teacher sometimes used other alternatives to put games in the class without technological devices which was considered as more efficient.

## CONCLUSION

Kahoot! as a cognitive tool in the teaching and learning process has given positive impact on students to lead them to become more motivated and engaged. These advantages lead the effective learning.

Students' engagement in the learning process includes behavioral, emotional, and cognitive engagement. Despite those advantages, internet connection and time constraints in answering the quiz are found as challenges in experiencing Kahoot! However, time restriction is a part of successful gamification principles because it promotes competitive aspects among other users and creates more attractive learning (Jueru et al., 2019).

In addition, since "online" is one of the characteristics of Kahoot! (Cameron & Bizo, 2019), the internet connection is a vital factor in conducting the success of Kahoot integration in teaching and learning activities. Therefore, it needs to be used as important consideration before implementing this online game-based learning platform, such as Kahoot!

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